ABSTRACT OF THE DISCLOSURE

A polymeric composition having antimicrobial properties and a process for rendering the surface of a substrate antimicrobial are disclosed. The composition comprises a crosslinked chemical combination of (i) a polymer having amino group-containing side chains along a backbone forming the polymer, (ii) an antimicrobial agent selected from quaternary ammonium compounds, gentian violet compounds, substituted or unsubstituted phenols, biguanide compounds, iodine compounds, and mixtures thereof, and (iii) a crosslinking agent containing functional groups capable of reacting with the amino groups. In one embodiment, the polymer is a polyamide formed from a maleic anhydride or maleic acid ester monomer and alkylamines thereby producing a polyamide having amino substituted alkyl chains on one side of the polyamide backbone; the crosslinking agent is a phosphine having the general formula $(A)_3P$ wherein A is hydroxyalkyl; and the antimicrobial agent is chlorhexidine, dimethylchlorophenol, cetyl pyridinium chloride, gentian violet, triclosan, thymol, iodine, and mixtures thereof.